UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,772	12/21/2001	Huayan Wang	1273	4705

23720 7590 11/02/2005

WILLIAMS, MORGAN & AMERSON, P.C.
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER	
ZHONG, CHAD	

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/029,772	WANG ET AL.	
	Examiner	Art Unit	
	Chad Zhong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

FINAL ACTION

1. This action is responsive to communications: Amendment, filed on 09/09/2005. This action has been made final.

2. Claims 1-28 are presented for examination. In amendment, filed on 09/09/2005:

Claims 1, 2, 10, and 23 have been amended.

Claims 3-9, 11-22, and 24-28 are previously presented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-7, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, US 6,260,029 in view of Faul, US 2002/0013899.

6. As per claim 1 and 10, Critelli teaches a security envelope, comprising:

a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding (Fig 8, item 38):

a public component (shipping information, postal verification information, Col. 4, lines 10-15; Fig. 1, item 36; Fig 8, item 38), comprising a digital signature signed by the sender encrypted by the private key of the sender (Col. 3, lines 1-5); and

a private component (non-shipping information, advertising material, Col. 3, lines 47-57), comprising a digital signature signed by the sender (Col. 2, lines 60 – Col. 3, lines 5; Col. 3, lines 47-66; Col. 4, lines

1-14).

Critelli does not explicitly teach a private component, encrypted by the public key of the receiver

In a similar system dealing with encryption, Faul teaches encryption of first set of information (essential elements) using the private key of the sender (vendor), which is equivalent to the public component of Critelli, this is done so that the originator of the content can be verified if there is a need (see for example, [0026-0027]). Additionally, Faul teaches receiver (Vendee) being able to view a second set of information (non-essential elements, which is equivalent to the private component of Critelli) to get "a sense" of what is the content ([0026]). Furthermore, Faul suggests encryption of the second set of information using the receiver's public key ([0029], vendee public key), so that only the receiver can decrypt the encrypted information as inferred by paragraph ([0029], [0033]). Security of the system as taught by Faul is increased as to prevent unauthorized viewing by a third party. Hence it would have been obvious to the person ordinary skilled in the art to combine teachings of Critelli and Faul so as to encrypt private component using receiver's public key, enabling the receiver as the only viewer of the content and to prevent unauthorized viewing by a third party.

7. As per claim 2 and 11, Critelli and Faul teach the public component and the private component each include a digital mail identification (Critelli, Col. 4, lines 55 – Col. 5, lines 10, Fig 8; Col. 6, lines 45-55, wherein the private identification is portions of the mailing the sender wish to include or not include within the mail piece depending upon the target audience of the specific mailing; the public mail identification is the barcode that identifies the public component information, i.e. barcode 36, Fig 2)

8. As per claim 3 and 12, Critelli and Faul teaches the barcode further encodes return address information (Critelli, Col. 2, lines 35-50).

9. As per claim 6 and 15, Critelli and Faul teaches the barcode further encodes stamp information

(Critelli, Col. 2, lines 35-50).

10. As per claim 4 and 13, Critelli and Faul teach the barcode further encodes information relating to the physical characteristics of the security envelope (Critelli, Col. 2, lines 35-50).

11. As per claim 5 and 14, Critelli and Faul teach the information relating to the physical characteristics of the security envelope include at least one of:

(a) the date the security envelope was sealed (Critelli, Col. 2, lines 42-43, the envelope was stamped and then mailed out at a particular location);

(b) the size of the security envelope; and

(c) the weight of the security envelope.

12. As per claim 7, Critelli and Faul teach the security envelope further comprises a physical authentication identification (Critelli, Fig 8, item 18) and wherein the barcode further comprises a digital representation of the physical authentication identification (Critelli, Fig 8, item 38).

13. Claim 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli and Faul, as applied to claim 1, further in view of Applicant Admitted Prior Art (hereinafter AAPA).

14. As per claim 8, Critelli and Faul do not explicitly teach an optically clear epoxy with air bubbles suspended therein.

However, AAPA teaches the above sections in page 5 of specification. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Faul and AAPA because the teaching of AAPA to allow where the physical authentication identification comprises an optically clear epoxy with air bubbles suspended therein would improve the security measures for Critelli and Faul's system by encoding additional information using another type of security technique within the barcode.

15. As per claim 9, Critelli and Faul do not explicitly teach the physical authentication identification comprises a cloth made from non-woven 40 micron diameter polymer fibers. However, AAPA discloses the above section in page 5 of specification. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli and Faul and AAPA because the teaching of AAPA to allow where the physical authentication identification comprises a cloth made from non-woven 40 micron diameter polymer fibers would improve the security measures for Critelli and Faul's system by encoding information using additional security technique within the barcode.

16. As per claims 16-17, claims 16-17 are rejected for the same reasons as rejection to claims 8-9 above respectively.

17. Claim 18-21, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, Faul, as applied to claim 1, further in view of Moore US 5,917,925.

18. As per claim 18, Critelli and Faul do not explicitly teach:

measuring the physical identification information;

decoding the digital mail identification;

comparing the measured physical identification information with the decoded digital mail identification.

However, Moore teaches the above section in the sample sections of Col. 4, lines 30-45, wherein the decoded information are compared with the pre-stored information in a database, which was measured and entered into the database at one point or another, the comparison takes place to identify the use of authentic indicia marks by unauthorized personnel, or identify the use of authorized indicia without proper fee payment or to identify improperly distributed mailpieces, or to obtain additional information

on the inspected mail piece. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Faul and Moore because the teaching of Moore to allow measuring the physical identification information; decoding the digital mail identification; comparing the measured physical identification information with the decoded digital mail identification would improve the security measures for Critelli and Faul's system by checking to see if the information received is the correct information pertaining to the user.

19. As per claim 19, Critelli, Faul and Moore teach the method as in claim 18, wherein at least one of the steps of (1) measuring the physical identification information, and (2) decoding the digital mail identification is accomplished using an optical scanner (Critelli, Col. 4, lines 15-20).

20. As per claim 20, Critelli and Faul do not explicitly teach the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer.

However, Moore teaches the above section in Col. 5, lines 1-10 and Col. 26, lines 37-54, where the mobile computer is the field reader. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Faul and Moore and Critelli because the teaching of Moore to allow wherein the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer would improve the mobility for Critelli and Faul's system by extending this type of operation into the field carried by company workers.

21. As per claim 21, Critelli and Faul do not explicitly teach transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium.

However, Moore teaches the above section on sample section of Col. 26, lines 37-56, Col. 11, lines 5-20. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Faul and Moore because the teaching of Moore to allow transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium would improve the storage ability and mobility for Critelli and Faul's system by keeping track of all the events occurring with the package scanning while in a distributed wireless environment.

22. As per claim 23, claim 23 is rejected for the same reasons as rejection to claim 1, 10, 18 above.

23. As per claim 24-26, claims 24-26 are rejected for the same reason as rejection to claims 2, 8-9 above respectively.

24. As per claim 27, Critelli and Faul do not explicitly teach a wired computer network capable of communication with the at least one mobile computers via a wireless medium.

However, Moore teaches a wired computer network capable of communication with the at least one mobile computers via a wireless medium (Col. 5, lines 1-15). System of Moore teaches of field readers reading information on the field and eventually interconnects with the wired system for information updates. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Faul and Moore because the teaching of Moore to allow a wired computer network capable of communication with the at least one mobile computers via a wireless medium would improve mobility for Critelli and Faul's system by keeping track of all the events occurring with the package scanning while in a distributed wireless environment.

25. Claim 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, US 6,260,029 in view of Faul, US 2002/0013899, in view of Moore US 5,917,925, in further view of

'Official Notice'.

26. As per claim 22, Critelli and Moore do not explicitly teach the method as in claim 21, wherein the wired computer network is connected to the Internet and the transmitting the identification data to a wired computer network via a wireless medium uses a TCP/IP protocol. "Official Notice" is taken that the concept and advantages of providing for TCP/IP in a wireless network is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include wireless TCP/IP with Lewis and Moore because it would provide for a robust connection oriented transfer medium.

27. As per claim 28, claim 28 is rejected for the same reasons as rejection to claim 22 above.

Response to Arguments

28. Applicant's arguments with respect to claims 1-28 have been considered but are not persuasive.

29. In the remarks, the Applicant argued in substance that Critelli does not teach a "private component" and that Examiner argues that public key certificate 106 is the "equivalent" to the claimed "private component" feature.

In response to Applicant's arguments, Critelli teaches the "private component" limitation. In the written record, the Examiner never argued that public key certificate 106 is the "equivalent" to the claimed "private component" feature, the assertions by the Applicant does not coincide with the Examiner's understanding of Critelli. Critelli teaches multiple embodiments about encryption using keys, particularly, there are two main teachings of encryption algorithms used for encrypting various user data. One being digitally signed document by the sender (hereinafter RSA) and the other being digitally signed by a public key certificate (hereinafter SMPKC). The rejection is not based (emphasis added) on the SMPKC embodiment. Referring to Col. 4, lines 1-14, the non-shipping information (private) as well as the shipping information (public) can both be encoded within a barcode using RSA algorithm. Thus,

Applicant's argument regarding to public key certificate 106 and 3rd party certificate authority has been overcome.

30. In the remarks, the Applicant argued in substance that there lacks motivation to combine teaching of Critelli and Faul.

In response to Applicant's arguments, the motivation to combine is not a conclusory statement, rather, it is taught in Faul. See [0008] for support.

Conclusion

31. **THIS ACTION IS MADE FINAL.** Applicant is reined of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to method of providing router with subnetwork address pool in a cellular telecommunications network.

i. US 2001/0003823 Mighdoll et al.

ii. US 6,002,720 Yurt et al.

iii. US 2002/0069113 Stern

iv. US 6,412,073 Rangan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ
September 26, 2005

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER